

WHAT IS CLAIMED IS:

1. A communications terminal for transmitting/receiving data to/from a server over a network, comprising:

a data request section for making a data request for
5 said server to forward start-up data which includes application data relating to start-up of an application, and authentication type data indicating an authentication mode for authenticating the application data;

10 a data reception section for receiving said start-up data coming from said server in response to said data request;

a first authentication section for authenticating said authentication type data received by said data reception section under a predetermined authentication mode;

15 a second authentication section for authenticating, corresponding to said first authentication section succeeding in authentication, said application data received by said data reception section under an authentication mode indicated by the authentication type data which has been done with authentication; and

20 an application start-up section for reading, corresponding to said second authentication section succeeding in authentication, said application data which has been done with authentication, and starting up said application.

2. The communications terminal according to claim 1,
further comprising an application information storage section for
storing application information which indicates a correspondence
between the application and the authentication mode used for
5 authenticating said application data relating to the application,
wherein

when said start-up data has none of said authentication
type data, said second authentication section determines the
authentication mode based on said application information.

3. The communications terminal according to claim 1,
wherein by designating said application data stored in said server
using a Web browser, said data request section makes the data
request for the application data.

4. A communications terminal for
transmitting/receiving data to/from a server over a network,
comprising:

5 a data request section for making a data request for
said server to forward start-up data which at least includes
application data relating to execution of an application;

a data reception section for receiving said start-up
data coming from said server in response to said data request;

10 an application information storage section for storing
application information which indicates a correspondence between

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the application and an authentication mode used for authenticating said application data relating to the application;

an authentication section for authenticating said start-up data received by said data reception section under an authentication mode indicated by said application information;

15 an application start-up section for reading, corresponding to said authentication section succeeding in authentication, the application data which has been done with authentication, and starting up said application; and

20 under a condition that said start-up data includes both said application data and authentication type data which indicates an authentication mode used for authenticating the application data, an application information update section for updating, corresponding to said authentication section

25 succeeding in authentication, the authentication mode in said application information stored in said application information storage section into the authentication mode indicated by the authentication type data which has been done with authentication.

5. A network system including a server and a communications terminal for data transmission/reception therebetween over a network, wherein
said server comprises:

5 a start-up data storage section for storing start-up data which includes application data relating to execution of an

application, and authentication type data indicating an authentication mode used for authenticating the application data; and

10 a data transmission section for forwarding the start-up data stored in said start-up data storage section in response to a data request for said start-up data coming from said communications terminal, and

said communications terminal comprises:

15 a data request section for making the data request for said start-up data;

a data reception section for receiving the start-up data coming from said server in response to said data request;

20 a first authentication section for authenticating said authentication type data received by said data reception section under a predetermined authentication mode;

25 a second authentication section for authenticating, corresponding to said first authentication section succeeding in authentication, said application data received by said data reception section under the authentication mode indicated by the authentication type data which has been done with authentication; and

30 an application start-up section for reading, corresponding to said second authentication section succeeding in authentication, the application data which has been done with authentication, and starting up said application.

6. A network system including a server and a communications terminal for data transmission/reception therebetween over a network, wherein
said server comprises:

5 a start-up data storage section for storing start-up data which at least includes application data relating to execution of an application; and

10 a data transmission section for forwarding the start-up data stored in said start-up data storage section in response to a data request for said start-up data coming from said communications terminal, and

said communications terminal comprises:

a data request section for making the data request for said start-up data;

15 a data reception section for receiving the start-up data coming from said server in response to said data request;

an application information storage section for storing application information which indicates a correspondence between the application and an authentication mode used for 20 authenticating said application data relating to the application,

an authentication section for authenticating said start-up data received by said data reception section under the authentication mode indicated by said application information;

25 an application start-up section for reading, corresponding to said authentication section succeeding in

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authentication, said application data which has been done with authentication, and starting up said application; and

under a condition that said start-up data includes both said application data and authentication type data which

30 indicates an authentication mode used for authenticating the application data, an application information update section for updating, corresponding to said authentication section succeeding in authentication, the authentication mode in said application information stored in said application information

35 storage section into the authentication mode indicated by the authentication type data which has been done with authentication.

7. A computer program embodied on a computer readable medium, said computer program for use with a computer operable in a communications terminal for transmitting/receiving data to/from a server over a network, said program comprising:

5 a data request step of making a data request for said server to forward start-up data which includes application data relating to start-up of an application, and authentication type data indicating an authentication mode for authenticating the application data;

10 a data reception step of receiving said start-up data coming from said server in response to said data request;

a first authentication step of authenticating said authentication type data received in said data reception step

under a predetermined authentication mode;

15 a second authentication step of authenticating, corresponding to said first authentication step succeeding in authentication, said application data received in said data reception step under an authentication mode indicated by the authentication type data which has been done with authentication;

20 and

 an application start-up step of reading, corresponding to said second authentication step succeeding in authentication, said application data which has been done with authentication, and starting up said application.

8. A computer program embodied on a computer readable medium, said computer program for use with a computer operable in a communications terminal for transmitting/receiving data to/from a server over a network, said program comprising:

5 said communications terminal previously includes application information which indicates a correspondence between an application and an authentication mode used for authenticating application data relating to the application,

 said program comprising:

10 a data request step of making a data request for said server to forward start-up data which at least includes the application data relating to execution of the application;

 a data reception step of receiving said start-up data

coming from said server in response to said data request;

15 an authentication step of authenticating said start-up data received in said data reception step under the authentication mode indicated by said application information;

 an application start-up step for reading, corresponding to said authentication step succeeding in 20 authentication, the application data which has been done with authentication, and starting up said application; and

 under a condition that said start-up data includes both said application data and authentication type data which indicates an authentication mode used for authenticating the 25 application data, an application information update step of updating, corresponding to said authentication step succeeding in authentication, the authentication mode in said application information which has been previously included into the authentication mode indicated by the authentication type data 30 which has been done with authentication.

9. A data authentication method used in a communications terminal for transmitting/receiving data to/from a server over a network, comprising:

5 a data request step of making a data request for said server to forward start-up data which includes application data relating to start-up of an application, and authentication type data indicating an authentication mode for authenticating the

application data;

a data reception step of receiving said start-up data
10 coming from said server in response to said data request;

a first authentication step of authenticating said
authentication type data received in said data reception step
under a predetermined authentication mode;

a second authentication step of authenticating,
15 corresponding to said first authentication step succeeding in
authentication, said application data received in said data
reception step under an authentication mode indicated by the
authentication type data which has been done with authentication;
and
20 an application start-up step of reading, corresponding
to said second authentication step succeeding in authentication,
said application data which has been done with authentication,
and starting up said application.

10. A data authentication method used in a
communications terminal for transmitting/receiving data to/from
a server over a network,

5 said communications terminal previously includes
application information which indicates a correspondence between
an application and an authentication mode used for authenticating
application data relating to the application,

said method comprising:

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 a data request step of making a data request for said
10 server to forward start-up data which at least includes the
application data relating to execution of the application;
 a data reception step of receiving said start-up data
coming from said server in response to said data request;
 an authentication step of authenticating said
15 start-up data received in said data reception step under the
authentication mode indicated by said application information;
 an application start-up step for reading,
corresponding to said authentication step succeeding in
authentication, the application data which has been done with
20 authentication, and starting up said application; and
 under a condition that said start-up data includes
both said application data and authentication type data which
indicates an authentication mode used for authenticating the
application data, an application information update step of
25 updating, corresponding to said authentication step succeeding
in authentication, the authentication mode in said application
information which has been previously included into the
authentication mode indicated by the authentication type data
which has been done with authentication.